

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amendment) A storage processing device, comprising:
an input/output module including:
 - port processors to receive and transmit network traffic; and
 - a switch coupling said port processors,each port processor of said port processors including:
 - a node to receive and transmit said network traffic;
 - dedicated hardware assist circuitry to perform first selected port processing functions;an embedded processor and associated port processor firmware to perform second selected port processing functions; and
 - a frame classifier to determine if said network traffic should be provided directly to said embedded processor without passing through said switch or directly to said switch.
2. (Previously Presented) The storage processing device of claim 1 further comprising:
 - a control module coupled to said input/output module through said switch, said input/output module directly processing the majority of said network traffic, and said control module processing a minority of said network traffic, and
 - wherein said frame classifier further determines if said network traffic should be provided to said control module through said switch.

3. (Currently Amended) The storage processing device of claim 1, each port processor further including a second embedded processor and associated port processor firmware to perform said second selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

4. (Currently Amended) The storage processing device of claim 1, each port processor further including a second embedded processor and associated port processor firmware to perform third selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

5. (Currently Amended) The storage processing device of claim 4, each port processor further including a third embedded processor to perform fourth selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

6. (Currently Amended) The storage processing device of claim 4, each port processor further including a third embedded processor to perform one of second or third port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

7. (Original) The storage processing device of claim 1, wherein the node is a Fibre Channel node.

8. (Original) The storage processing device of claim 1, wherein the node is an Ethernet node.

9. (Previously Presented) The storage processing device of claim 1, wherein said frame classifier further determines if said network traffic should be provided to an embedded processor in another port processor through said switch.

10. (Currently Amended) A fabric for coupling at least one host and at least one storage device, the fabric comprising:

at least one switch for coupling to the at least one host and the at least one storage device; and

a storage processing device coupled to the at least one switch and for coupling to the at least one host and the at least one storage device, the storage processing device including:

an input/output module including:

port processors to receive and transmit network traffic; and

a switch coupling said port processors,

each port processor of said port processors including:

a node to receive and transmit said network traffic;

dedicated hardware assist circuitry to perform first selected port processing functions;

an embedded processor and associated port processor firmware to perform second selected port processing functions; and

a frame classifier to determine if said network traffic should be provided directly to said embedded processor without passing through said switch or directly to said switch.

11. (Previously Presented) The fabric of claim 10 further comprising:

a control module coupled to said input/output module through said switch, said input/output module directly processing the majority of said network traffic, and said control module processing a minority of said network traffic, and

wherein said frame classifier further determines if said network traffic should be provided to said control module through said switch.

12. (Currently Amended) The fabric of claim 10, each port processor further including a second embedded processor and associated port processor firmware to perform said second selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

13. (Currently Amended) The fabric of claim 10, each port processor further including a second embedded processor and associated port processor firmware to perform third selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

14. (Currently Amended) The fabric of claim 13, each port processor further including a third embedded processor to perform fourth selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

15. (Currently Amended) The fabric of claim 13, each port processor further including a third embedded processor to perform one of second or third port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

16. (Original) The fabric of claim 10, wherein the node is a Fibre Channel node.

17. (Original) The fabric of claim 10, wherein the node is an Ethernet node.

18. (Previously Presented) The fabric of claim 10, wherein said frame classifier further determines if said network traffic should be provided to an embedded processor in another port processor through said switch.

19. (Currently Amended) A network comprising:
at least one host;
at least one storage device; and
a fabric coupling the at least one host and the at least one storage device, the fabric comprising:
at least one switch for coupling to the at least one host and the at least one storage device; and
a storage processing device coupled to the at least one switch and for coupling to the at least one host and the at least one storage device, the storage processing device including:
an input/output module including:
port processors to receive and transmit network traffic; and
a switch coupling said port processors,
each port processor of said port processors including:
a node to receive and transmit said network traffic;
dedicated hardware assist circuitry to perform first selected port processing functions;
an embedded processor and associated port processor firmware to perform second selected port processing functions; and
a frame classifier to determine if said network traffic should be provided directly to said embedded processor without passing through said switch or directly to said switch.

20. (Previously Presented) The network of claim 19 further comprising:
a control module coupled to said input/output module through said switch, said input/output module directly processing the majority of said network traffic, and said control module processing a minority of said network traffic, and

wherein said frame classifier further determines if said network traffic should be provided to said control module through said switch.

21. (Currently Amended) The network of claim 19, each port processor further including a second embedded processor and associated port processor firmware to perform said second selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

22. (Currently Amended) The network of claim 19, each port processor further including a second embedded processor and associated port processor firmware to perform third selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

23. (Currently Amended) The network of claim 22, each port processor further including a third embedded processor to perform fourth selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

24. (Currently Amended) The network of claim 22, each port processor further including a third embedded processor to perform one of second or third port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

25. (Original) The network of claim 19, wherein the node is a Fibre Channel node.

26. (Original) The network of claim 19, wherein the node is an Ethernet node.

27. (Previously Presented) The network of claim 19, wherein said frame classifier further determines if said network traffic should be provided to an embedded processor in another port processor through said switch.

28. (Currently Amended) A method for handling network traffic in a storage processing device, comprising:

providing an input/output module including:

port processors receiving and transmitting network traffic; and
a switch coupling said port processors,

each port processor of said port processors including:

a node receiving and transmitting said network traffic;
dedicated hardware assist circuitry performing first selected port

processing functions;

an embedded processor and associated port processor firmware
performing second selected port processing functions; and

a frame classifier determining if said network traffic should be provided
directly to said embedded processor without passing through said switch or directly to
said switch.

29. (Previously Presented) The method of claim 28 further comprising:

providing a control module coupled to said input/output module through said
switch, said input/output module directly processing the majority of said network traffic,
and said control module processing a minority of said network traffic, and

wherein said frame classifier further determines if said network traffic should be
provided to said control module through said switch.

30. (Currently Amended) The method of claim 28, each port processor further including a second embedded processor and associated port processor firmware to perform said second selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

31. (Currently Amended) The method of claim 28, each port processor further including a second embedded processor and associated port processor firmware to perform third selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said second embedded processor without passing through said switch.

32. (Currently Amended) The method of claim 31, each port processor further including a third embedded processor to perform fourth selected port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switch.

33. (Currently Amended) The method of claim 31, each port processor further including a third embedded processor to perform one of second or third port processing functions, and

wherein said frame classifier further determines if said network traffic should be provided directly to said third embedded processor without passing through said switches.

34. (Original) The method of claim 28, wherein the node is a Fibre Channel node.

35. (Original) The method of claim 28, wherein the node is an Ethernet node.

36. (Previously Presented) The method of claim 28, wherein said frame classifier further determines if said network traffic should be provided to an embedded processor in another port processor through said switch.